Amendment and Response Serial No. 10/008,392 Confirmation No. 3013 <u>System and Method Using Thermal Image Analysis for Polygraph Testing</u>

Remarks

The Advisory Action mailed September 3, 2003 following the submittal of a Response on August 8, 2003 to a Final Office Action mailed June 4, 2003 has been received and reviewed. Claims 1, 12, 22-23, 30, and 36 have been amended. No claims have been cancelled. Therefore, claims 1-40 are pending in the present application. Consideration of the accompanying Amendment and Romarke submitted with the Request for Continued Examination is respectfully requested.

Interview Summary

Following submittal of the response to the Final Office Action mailed 4 June 2003, Applicant's attorney, Mark J. Gebhardt, has spoken with the Examiner, at the Examiner's initiation, regarding the pending claims. Although agreement with respect to allowable claim language was not reached during such conversations, the amendments made to the claims herein are a result of such conversations. At that time, the Examiner indicated that the Applicant need not provide a summary of such conversations. However, as the Advisory Action mailed 3 September 2003 did not set forth a summary, Applicant provides the above remarks in lieu thereof.

Claim Amendments

The claims 1, 12, 23, 30, and 36 have been amended to make it clear that calculated change of blood flow rate data is used according to the present invention. Further, claim 22 has been amended to delete mistaken language in the preamble.

The Examiner in the previous Final Office Action mailed 4 June 2003 continues to rely on Anbar to reject the pending claims of the application. Although Applicant continues to traverse such previous rejections, the claims have been amended to clearly distinguish the present claimed invention from the Anbar reference, even though it is believed that the previous claims provided such distinguishing characteristics. Such claim amendments are made with respect to Anbar only and not with respect to any other art cited or uncited. As such, the pending

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claims are to be interpreted as broadly as possible to encompass all equivalents thereto without being interpreted to read on Anbar.

With respect to the previous rejections based on Anbar, Anbar does not describe transformation of thermal image data to change of blood flow rate. For example, such transformation to change of blood flow rate according to the present invention is described, in one embodiment, in the specification at pages 24-27. Such a transformation of thermal image data to change of blood flow rate is not described in Anbar contrary to the Examiner's allegations, nor would such a transformation be "performed, during normal operation" in Anbar.

Anbar uses a thermal imaging system. However, Anbar does not transform thermal image data to change of blood flow rate. Anbar simply determines a thermal quantity referred to as "HST." HST is defined as the average temperature divided by the standard deviation of the average temperature; a dimensionless parameter. In Anbar, it is indicated that "to a much lesser extent" HST is "affected "by the blood flow in subcutaneous vessels." In other words, Anbar assumes that the quantity HST is correlated indirectly with blood perfusion. However, there is no transformation of thermal image data to change of blood flow rate as described in the pending claims (e.g., a heat transfer equation that allows one to compute blood flow rate values out of thermal values). Anbar does not compute blood flow rate values, but rather Anbar uses derivative thermal values (i.e., HST) that are assumed to be, at least in part, the result of quantitatively unspecified blood flow changes.

As such, Anbar never calculates change of blood flow rate as described in the amended claims. Rather, HST values are determined by Anbar that are assumed to be, at least in part, the result of quantitatively unspecified blood flow changes. This determination of HST values is not a determination or transformation of thermal data to change in blood flow rate, but rather a determination of a dimensionless value that is defined as the average temperature divided by the standard deviation of the average temperature. There is no calculation of change of blood flow rate.

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Summary

It is respectfully submitted that the pending claims are in condition for allowance in view of the above amendments and remarks, and notification to that effect is respectfully requested. The Examiner is invited to contact Applicant's Representatives, at the below-listed telephone number, if it is believed that prosecution of this application may be assisted thereby.

> Respectfully submitted for **PAVLIDIS**

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CERTIFICATE UNDER 37 CFR §1.8:

Oct 2003

The undersigned hereby certifies that the Transmittal Letter and the paper(s), as described hereinabove, are being transmitted by facsimile in accordance with 37 CFR §1.6(d) to the Patent and Trademark Office, addressed to

By:

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